

City of Lake Jackson

2014 Drinking Water Quality Report



Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 979-415-2500.

Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before treatment include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic system, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Where do we get our drinking water?

Our drinking water is obtained from surface water and 12 ground water wells. It comes from the following: the Gulf Coast Aquifer and the Brazos River. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact David Ellis with the City of Lake Jackson 979-415-2680.

ALL drinking water may contain contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

In the water loss audit submitted to the Texas Water Development board for the time period of Jan-Dec 2014 our system lost an estimated 18.74%. We reused all of our treated wastewater. If you have any questions about the water loss audit, please call the public water system at 979-415-2680.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment

The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information source water assessments and protection efforts at our system, contact David Ellis Superintendent of Utilities at 979-415/2680

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://dww.tceq.texas.gov/DWW>

Source Water Name	Type of water	Location	Report Status
Well # 4	Ground Water	101 Oyster Creek Drive	Active
Well # 5	Ground Water	6 Oak Drive	Active
Well # 7	Ground Water	103 Beechwood	Active
Well # 8	Ground Water	302 Magnolia	Active
Well # 9	Ground Water	334 Circle Way	Active
Well # 10	Ground Water	709 Youpon	Active
Well # 11	Ground Water	711 Youpon	Active
Well # 12	Ground Water	705 Youpon	Active
Well # 14	Ground Water	101 Cottonwood	Active
Well # 15	Ground Water	319 Balsam	Active
Well # 16	Ground Water	102 Youpon	Active
Well # 17	Ground Water	889 FM 2004 Hwy	Active
SW From Brazosport Water Authority	Surface Water	103 Beechwood	Active
SW From Brazosport Water Authority	Surface Water	6 Oak Drive	Active

SPECIAL NOTICE

Required language for ALL community public water supplies:

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines or appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

About the following pages

The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and your children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The City of Lake Jackson is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

DEFINITIONS:

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Average;(Avg) – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ABBREVIATIONS:

mrem / year: millirems per year (a measure of radiation absorbed by the body)

na: not applicable

NTU - Nephelometric Turbidity Units

MFL - million fibers per liter (a measure of asbestos)

pCi/l - picocuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/l)

ppb - parts per billion, or micrograms per liter (ug/l)

ppt - parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Inorganic Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2014	.383	0.162-0.383	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
Fluoride	2014	.63	0.57-0.63	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum.
Nitrate** (measured as Nitrogen)	2014	.28	0-0.28	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

**Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226-228	05/01/12	1.9	1.9-1.9	0	5	pCi/l	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2014	2.8	2.8-2.8	0	15	pCi/l	N	Erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2014	10	1.2-18.9	No goal for the total	60	ppb	n	By-product of drinking water chlorination.
Total Trihalomethanes (TTHm)*	2014	17	1-26.7	No goal for the total	80	ppb	n	By-product of drinking water chlorination.

Regulated Contaminants

Synthetic organic including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2014	.15	0-0.15	3	3	ppb	n	Runoff from herbicide used on row crops.

*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2014	1.3	1.3	2.3	30	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2014	0	15	5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Secondary and Other Not Regulated Constituents (No associated adverse health effects)

Yearly Disinfectant Level

Average of all chlorine Residuals for the year 2014	Lowest of all chlorine Residuals for the year 2014	Highest of all chlorine Residuals for the year 2014
mg/l	mg/l	mg/l
1.92	0.3	3.4

Type of Disinfectant Used in Distribution System: Chloramines (Total Chlorine)

Water Conservation Tips



In the Bathroom:

1. Take a five minute shower instead of a bath.
Amount saved: 15 gallons per shower
2. Don't use toilets as a wastebasket, flush only when you need to.
Amount saved: 12 or more gallons per day
3. When brushing teeth, use a glassful of water instead of running the tap.
Amount saved: 3 or more gallons per brushing.
4. When taking a bath, don't run the water without closing the drain first. The warm water that comes after running the tap for a while will take care of that first cold burst of water.

In the Kitchen:

1. When washing dishes by hand, fill up the sink with soap and water instead of running the water the whole time. *Amount saved: 25 gallons per load*
2. Keep a pitcher of water in the refrigerator when you want a drink instead of running the tap until the water cools. *Amount saved: 2 gallons per drink*
3. Thaw frozen foods in the refrigerator, not under running tap water. Amount saved: 5 or more gallons per meal
4. Start a compost pile as an alternative to using a kitchen sink garbage disposal.

Outside around your home:

1. Water your lawn during the early morning hours when there are low temperatures and low winds. This reduces the amount of water you lose from evaporation.
2. Position your sprinklers to water only the lawn, not the sidewalk or street.
3. Don't waste water hosing down your driveway or sidewalk.
Amount saved: 25 gallons every five minutes not using hose
4. Drive your car over your lawn when washing to save on watering it, or use a commercial car wash that recycles water.
5. Don't over water your lawn during the summer, as a general rule it only needs to be watered every 5-7 days during this time.

City of Lake Jackson

25 Oak Drive
Lake Jackson, TX 77566

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Public Participation Opportunities:

Please contact David Ellis, Superintendent of Utilities, at 979-415-2680 with any questions.

Check out our website at www.lakejacksontx.gov for more information!

Public Water System Name: City of Lake Jackson

Year this report covers: 2011

Public Water System ID Number: TX0200006

Your public water system's telephone number: 979-415-2680